Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A process for producing a flow cell for the spectroscopic analysis of samples to be passed through, the process comprising the following steps:

(a) provision of a first ~~(10)~~ and of a second ~~(22)~~ window, the second window ~~(22)~~ having at least two sample flow channels ~~(24)~~ for supplying and removing the sample to be analyzed;

(b) application of a structured thin layer ~~(18)~~ to one of the windows ~~(10, 22)~~;

(c) contacting and liquid-tight securing of the thin layer ~~(18)~~ to the other ~~(22, 10)~~ window, in such a way that facing, plane-parallel window surfaces ~~(14, 20)~~ of the windows ~~(10, 22)~~ and the thin layer ~~(18)~~ delimit a flow chamber ~~(26)~~ which is accessible only through the sample flow channels ~~(24)~~, the windows ~~(10, 22)~~ being optically transparent at least in some regions at least in the region of the flow chamber ~~(26)~~; and

(d) filling at least some regions of a filling chamber ~~(28)~~ between the windows ~~(10, 22)~~ which is separated from the flow chamber ~~(26)~~ by the thin layer ~~(18)~~ and adjoins the structured thin layer ~~(18)~~ with adhesive, and

the liquid-tight securing of the thin layer ~~(18)~~ to the other ~~(22, 10)~~ window includes a softening of the thin layer ~~(18)~~ to temporarily lower its viscosity by increasing the temperature of the thin layer ~~(18)~~ and/or by increasing the pressure applied on the thin layer ~~(18)~~ to the other ~~(22, 10)~~ window, ~~which comprises~~ and wherein ~~removing~~ the thin layer ~~(18)~~ is removed after step (d).

2. (Currently Amended) The process as claimed in Claim 1, wherein the thin layer ~~(18)~~ consists of a viscous material having a viscosity of at least 10 000 mPas at a temperature of 20°C and the liquid-tight securing of the thin layer ~~(18)~~ to the other ~~(22, 10)~~ window includes the step of pressing the viscous thin layer ~~(18)~~ onto the other window ~~(22, 10)~~.

3. (Currently Amended) The process as claimed Claim 1, wherein a structured spacer layer ~~(16)~~ with predetermined layer thickness is applied to one of the window surfaces ~~(14, 20)~~ of at least one of the windows ~~(10, 22)~~, and the spacer layer ~~(16)~~ comes into contact with the window surface ~~(20, 14)~~ of the other window ~~(22, 10)~~ in step (c) in such a way that the distance between the window surfaces ~~(14, 20)~~ is determined by the thickness of the spacer layer ~~(16)~~.

4. (Currently Amended) The process as claimed in claim 3, wherein the spacer layer ~~(16)~~ is applied in an edge region of the window ~~(10, 22)~~.

5. (Currently Amended) The process as claimed in ~~one of the preceding claims~~ Claim 1, wherein the thin layer ~~(18)~~ has a complete circular shape.

6. (Currently Amended) The process as claimed in Claim 1, wherein at least one of the windows ~~(10, 22)~~ has at least one adhesive channel ~~(12)~~ for feeding the adhesive into the filling chamber ~~(28)~~.

7. (Currently Amended) The process as claimed in Claim 1, wherein the distance between the window surfaces ~~(14, 20)~~ after step (d) is in the range from 0.5 to 100 µm~~, preferably from 1 to 50 µm and most preferably from 3 to 15 µm~~.

8. (New) The process as claimed in Claim 1, wherein the distance between the window surface after step (d) is in the range from 1 to 50 µm.

9. (New) The process as claimed in Claim 1, wherein the distance between the window surfaces after step (d) is in the range from 3 to 15 µm.